

## **REMARKS**

Claims 1-5, 8 and 10 were pending in this case. Upon entry of this Amendment, Claim 1 will be cancelled, Claims 2-5, 8 and 10 will remain pending and will be amended as set forth herein, and Claims 11-28 will be newly added. Thus Claims 2-5, 8, 10 and 11-28 will be pending upon entry of this Amendment.

Support for newly added Claims 11-28 may be found among other places on page 22 of the specification.

### **I. The Section 112 First Paragraph Rejections**

Pages 7-9 of the Office Action reject Claims 1 and 5 for several reasons under 35 U.S.C. Section 112, first paragraph. Applicants respectfully traverse that rejection and assert that Claims 1 and 5 were fully described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. However, to remove issues from the case and advance its prosecution, Applicants have cancelled Claim 1 and have made Claim 2 the main independent claim in the application.

In so doing, Applicants believe the rejection under 35 U.S.C. Section 112, first paragraph is overcome. Applicants have further defined the term aryl in Claim 2 as amended hereby to "carbocyclic aryl".

### **II. The Section 112 Second Paragraph Rejections**

Pages 9-10 of the Office Action reject Claims 5 and 8 under 35 U.S.C. Section 112, second paragraph alleging that Claims 5 and 8 are indefinite. Applicants respectfully traverse and assert that Claims 5 and 8 as they stood prior to this Amendment were not indefinite.

However, to remove issues from the case, Claim 8 has defined the amount of active ingredient to be an effective amount. Further, reaction conditions have been specified in Claim 5, which reaction conditions are set forth, among other places, on page 22 of the specification. The term "if appropriate" does not appear in Claim 5. The discussion of salt formation has been removed from the Claim 5. The term "reaction auxiliary" has been replaced by the term "acid binder", which is supported on page 22 of the specification. Applicants are dismayed that the Examiner is not aware of what is meant by the term acid binder. That term is exceedingly well understood in the art to mean bases that react with acids so that the acid is removed from the reaction ("bound").

Applicants have fully supported this aspect of the claim by listing typical acid binders on page 22, lines 6-16 of the specification.

These amendments to the claims are believed to have fully overcome the Section 112 first and second paragraph rejections, and review and reconsideration of the claims and withdrawal of the rejections are respectfully requested.

### **III. The Restriction Requirement**

Applicants respectfully traverse maintaining of the restriction requirement in this case set forth on pages 2-3 of the Office Action. However to remove issues from the case, Claim 2 has been amended to delete "heterocyclyl or heterocyclalkyl" from R<sup>1</sup>. The reference to "aziridino, pyrrolidino, piperidino, morpholino" has been removed from R<sup>3</sup> in Claim 2. Further, the phrase "R<sup>3</sup> and R<sup>4</sup> together represent optionally branched alkanediyl having 3 to 6 carbon atoms" has been removed from Claim 2. In this way, applicants believe they comply with the restriction requirement set forth in this case, reserving the right to pursue those inventions in one or more continuing applications.

### **IV. The Section 103 Rejection**

For reasons appearing on pages 3 through 7 of the Office Action, Claims 1-5, 8 and 10 stand rejected under 35 U.S.C. Section 103(a) as being obvious over Muller et al I (U.S. Patent NO. 6,180,567), Muller II (WO 97/16449) and Daum et al (U.S. Patent No. 5,094,683).

With regard to Muller I, the present application filed January 11, 2002 is the national stage of a PCT application which in turn was filed July 4, 2000, which in turn claims priority back to German Patent Application 199 33 260.6 filed July 15, 1999. Muller I issued January 30, 2001 with a Section 371 date of August 7, 1998.

As this application was filed after November 29, 1999 and as both Muller I and the present application are commonly assigned to Bayer AG of Leverkusen, Germany and are therefore owned by the same person, it is believed the rejection under 35 U.S.C. Section 103(a) must be withdrawn with respect to Muller I.

With regard to Muller II, applicants agree that the instantly claimed compounds are positional isomers of Muller II. However, applicants strongly

assert that the prior art teaches away from the inventive substitution pattern of the thienyl moiety. The prior art does not disclose a single thienylsulphonyl-aminocarbonyl-triazoline wherein the thien-3-yl group is substituted with an ester group in the 5 position. In Muller II, the ester group is **always** in the 2 position of the thienyl-3-yl group.

The Office Action asserts that Daum et al teaches that the ester group may be at different positions on the ring, citing column 6, lines 1-17 thereof. But the Office Action is impermissibly selecting on part of Daum et al out of context, and is not fully and fairly considering what the reference teaches as whole. Column 8, lines 25-30 of Daum et al (which due to the US. PTO's printer error does not show the bond to the sufonyl group - see Claim 2 for the correct formula) describes as particularly preferred compounds which **always** have the ester in the 2 position of the thienyl-3-yl. Moreover **all** thienyl examples in Tables 1 and 3 of Daum et al disclose an ester in the 2 position. A person of ordinary skill reviewing Muller II and Daum et al would therefore conclude that the 2 position of the ester group is essential if highly active herbicidal compounds are to be obtained.

There is simply no effective motivation or suggestion in the references of any teaching other than the 2 position, other than a mere passing remark which the Office Action is not taking in context. There is no effective teaching or suggestion in the reference of what other position to choose, nor why the unexpectedly good results of the present invention would be obtained. It is at most an invitation to experiment, which has been held numerous times by the court to be insufficient to support an obviousness rejection.

In conclusion, the prior art does not fairly suggest the structure modifications of the present invention and in fact, when fully and fairly considered, teaches **away** from compounds having an ester at the 5 position.

Applicants direct the Examiner's attention to *In re Baird*, 29 USPQ 2d 1550 to 1552 wherein Judge Lourie, delivering the court's opinion stated:

"A disclosure of millions of compounds does not render obvious a claim to three compounds, particularly when that disclosure indicates a preference leading away from the claimed compounds."

Applicants respectfully strongly assert that the rejection under 35 U.S.C. Section 103(a) is not supported in this case and that the present claims are patentably distinct over Muller II and Daum et al., and U.S. Patent No. 6,180,567 the corresponding equivalent of Muller II. Applicants respectfully assert that the *Baird* decision is particularly relevant with respect to newly added Claims 11-28 which claim individual compounds.

#### **V. The Obviousness Type Double Patenting Rejection**

Applicants respectfully traverse the obviousness type double patenting rejection of Claims 1-5, 8 and 10 over Claims 1-6 of Muller I in view of Daum et al., and of Claims 1-3, 8 and 10 over Claims 1-9 of U.S. Patent No. 5,094,685, set forth on pages 10-11 of the Office Action.

By way of response, applicants reassert here the points and arguments made above in connection with the Section 103 rejection. Again, the references disclose millions of compounds, and in fact teach away from the instant selection of the claimed structural isomers for the reasons set forth above.

In particular, with regard to U.S. Patent No. 5,094,685, this reference cannot render obvious the compounds claimed in the present Claim 4 and in the newly added Claims 11-28, because in these claims R<sup>2</sup> is not hydrogen and the claimed compounds of these claims are not structural isomers with regard to the known compounds.

Applicants respectfully assert also that since the obviousness rejection of Claims 1-4 has been effectively overcome, the process of Claim 5 should also be allowable citing *In re Brouwer*, 37 USPQ2d 1663 and *In re Orchiai*, 37 USPQ2d 1127.

#### **VI. New Claims 11-28**

New Claims 11-28 have been added to claim the present invention in more varied scope. Support for newly added Claims 11-28 may be found, among other places, in Table 1 in the specification.

#### **VII. Supplemental IDS**

Applicants are submitting concurrently herewith, a Supplemental Information Disclosure Statement and fee by way of authorization to charge Deposit Account No. 50-2510, to bring European Patent Application EP-A 1113,

(corresponding to U.S. Patent No. 4,180,662) and WO 98/07721 (corresponding to U.S. Patent No. 6,200,931) to the Examiner's attention.

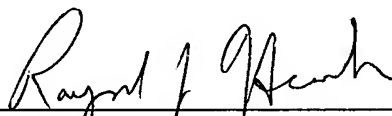
EP-A 1113 discloses the compound 3-carbomethoxy-5-cholorothiophene-4-sulfochloride.

WO 98/07721 was cited in the International Search Report in the PCT stage of the present application, and as the Form PCT/DO/EO/903 (371 Acceptance Notice) received in this case clearly indicates that the International Search Report and the references cited therein were received, the burden has fallen on the U.S. Patent Examiner to consider the reference. Applicants are sure that the Examiner has done so, but wish to have the reference cited on the fact of the patent that will issue on the present application, and therefore are submitting a Supplemental IDS with Form PTO 1449 listing the reference for that purpose.

### **VIII. Conclusion**

Applicants believe the foregoing addresses concerns and rejections raised in the Office Action. Applicants respectfully request review, consideration and allowance of the claims.

Respectfully submitted,

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